

WHAT IS CLAIMED IS:

1. An image formation apparatus comprising:
  - an image holder having a surface;
  - a latent image formation unit that forms an electrostatic latent image on the surface of the image holder;
  - a developing unit that develops the electrostatic latent image by using a charged toner; and
  - an image-receiving unit to which a toner image on the image holder is to be transferred;
  - a transferring unit that applies a transfer bias to the image-receiving unit to transfer the toner image onto the image-receiving unit, wherein
    - an amount of the transfer bias is set such that potential differences between surface potentials of an image section and a non-image section of the image holder and a surface potential of the image-receiving unit generate a discharging at the image section and do not generate a discharging at the non-image section.

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2. The image formation apparatus according to claim 1, wherein
  - the image-receiving unit is an intermediate transfer unit that transfers a primary-transfer toner image on the image holder onto a transfer material as a secondary

transfer.

3. The image formation apparatus according to claim 1,  
wherein

5 a surface potential  $V_{t1}$  of the image-receiving unit  
is set to satisfy

$$|V_i - V_{t1}| < V_d, |V_b - V_{t1}| > V_d$$

where,  $V_d$  represents a potential difference at which  
a discharging is started between two objects in the  
10 environment of forming an image,  $V_i$  represents a surface  
potential of the image section on the image holder, and  $V_b$   
represents a surface potential of the non-image section on  
the electrostatic latent image.

15 4. The image formation apparatus according to claim 2,  
wherein

the following relationships are satisfied

$$|V_i - V_{t2}| < V_d + |V_{t3}|, |V_b - V_{t2}| > V_d + |V_{t3}|$$

where,  $V_d$  represents a potential difference at which  
20 a discharging is started between two objects in the  
environment of forming an image,  $V_i$  represents a surface  
potential of the image section on the image holder,  $V_b$   
represents a surface potential of the non-image section on  
the image holder,  $V_{t2}$  represents a potential applied to the  
25 primary transfer section of the intermediate transfer unit,

and  $V_{t3}$  represents an attenuation of a potential difference due to the intermediate transfer unit.

5. The image formation apparatus according to claim 3,  
5 wherein

the potential difference  $V_d$  at which a discharging is started between two objects in the environment of forming an image is set to 320 V.

10 6. The image formation apparatus according to claim 2,  
wherein

a material that constitutes the intermediate transfer unit has a volume resistance of  $1 \times 10^3$  to  $10^{10} \Omega \text{ cm}$ .

15 7. The image formation apparatus according to claim 4,  
wherein

a material that constitutes the intermediate transfer unit has a volume resistance of  $1 \times 10^3$  to  $10^{10} \Omega \text{ cm}$ .

20 8. The image formation apparatus according to claim 1,  
the image formation apparatus further comprising:

a potential-difference amplifying unit that amplifies a potential difference between the image section and the non-image section of the image holder prior to the transfer 25 of the toner image onto the image-receiving unit.

9. The image formation apparatus according to claim 8,  
wherein

the potential-difference amplifying unit amplifies  
the potential difference by irradiating a beam onto the toner  
5 image after the surface of the image holder has been  
re-charged.

10. The image formation apparatus according to claim 1,  
wherein

10 the developing unit is a wet-type developing unit that  
develops an electrostatic latent image formed on the image  
holder, by using a liquid developing agent.